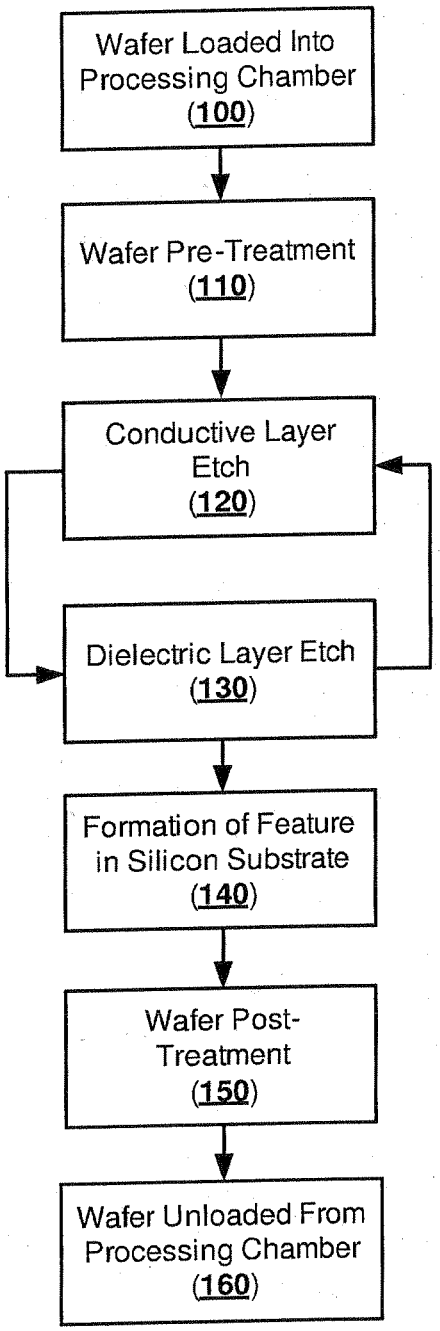

Wafer Loaded Into Processing Chamber (100)
Wafer Pre-Treatment (110)
Conductive Layer Etch (120)
Dielectric Layer Etch (130)
Formation of Feature in Silicon Substrate (140)
Wafer Post-Treatment (150)
Wafer Unloaded From Processing Chamber (160)

FIG. 1

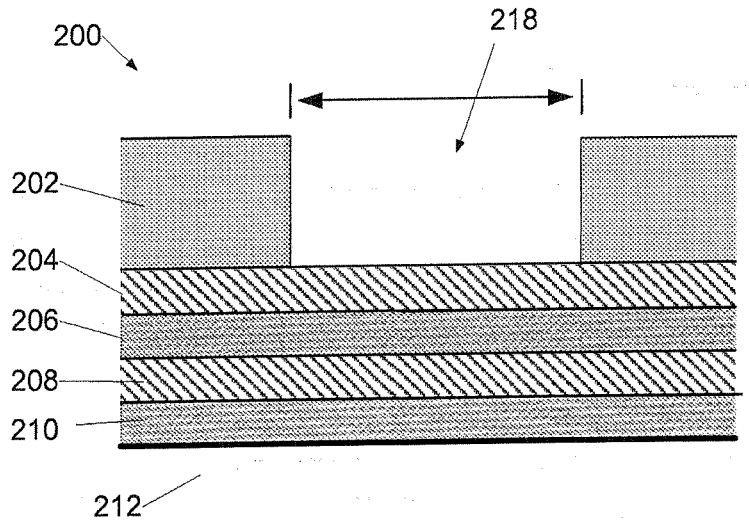


FIG. 2A

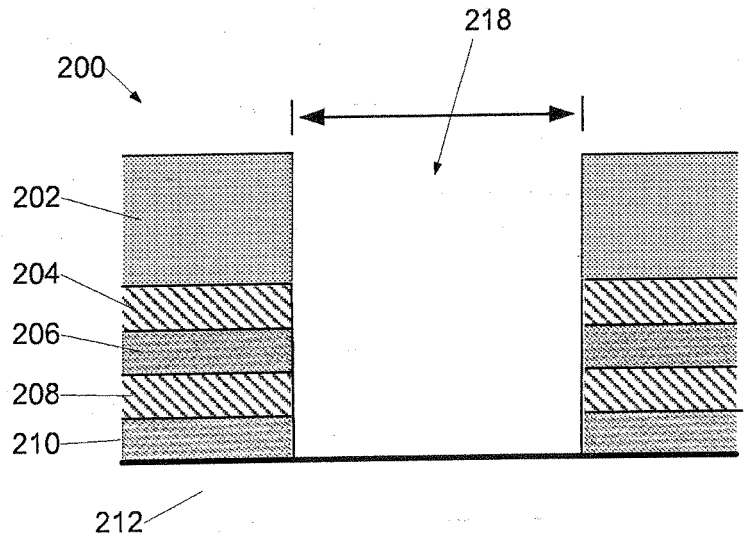


FIG. 2B

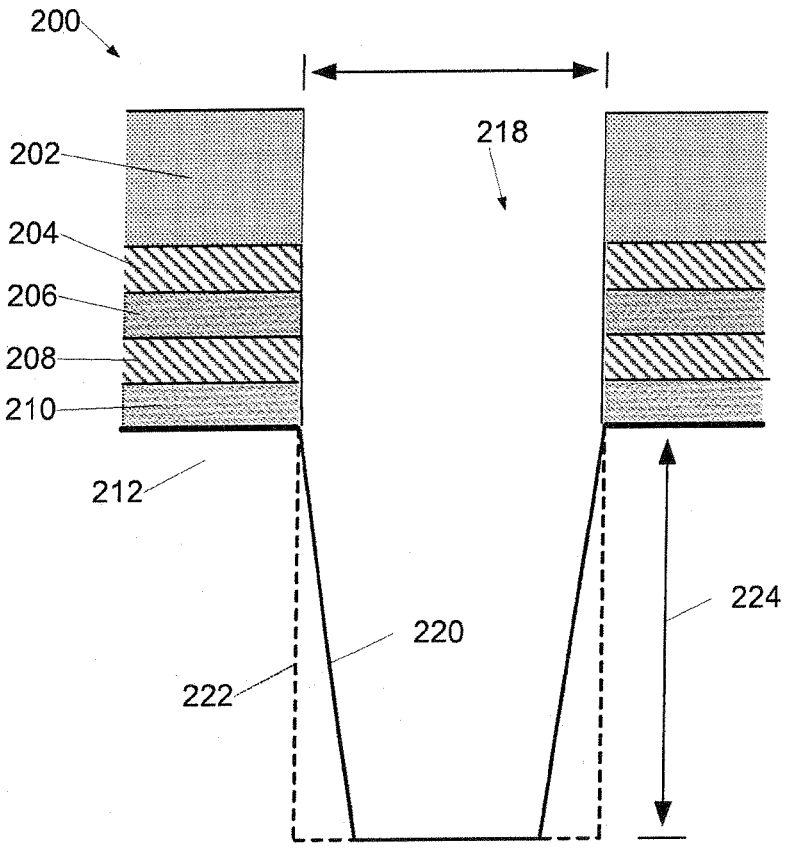


FIG. 2C

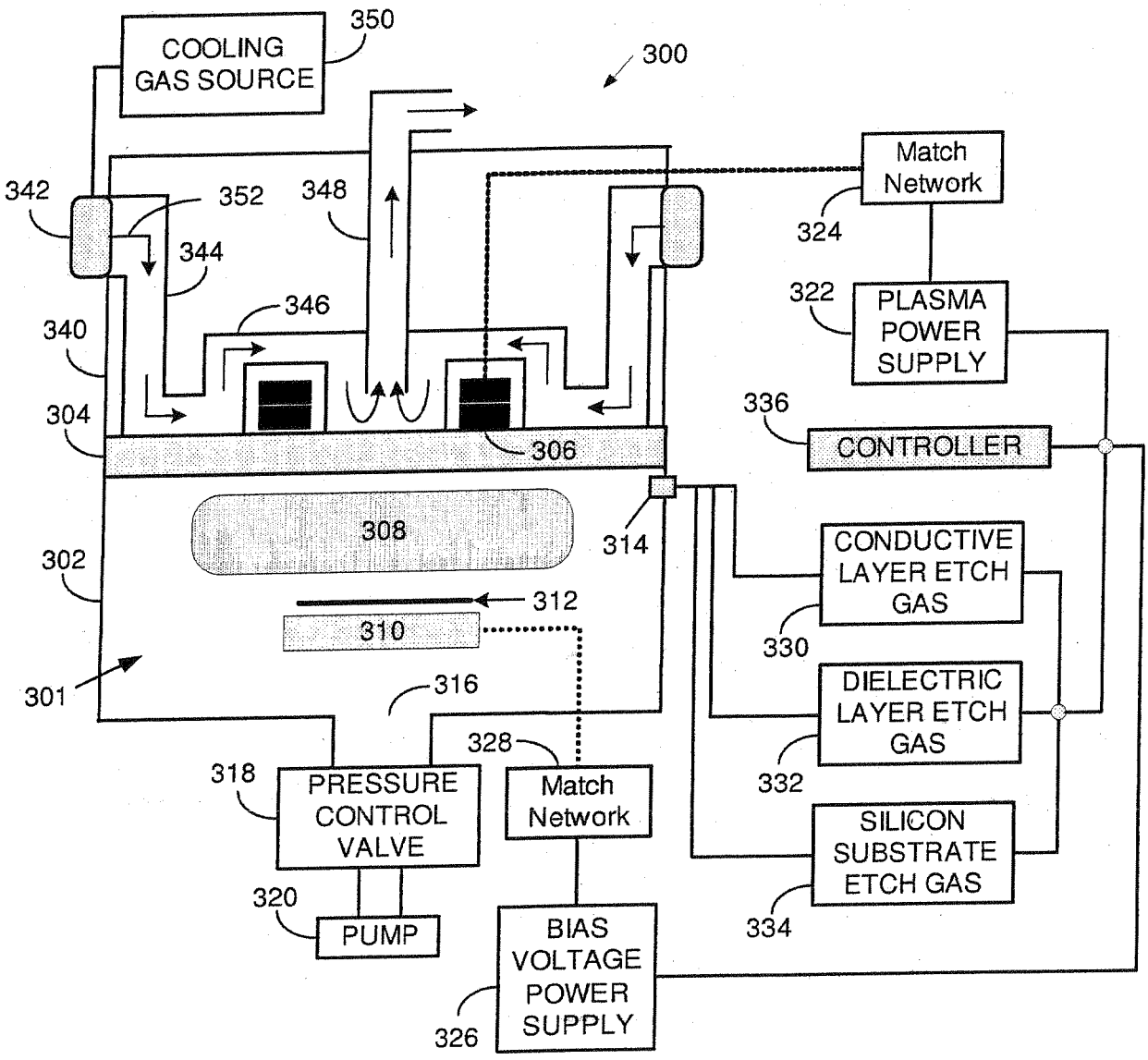

COOLING GAS SOURCE
350
300
Match Network
324
342
352
348
344
346
340
322
PLASMA POWER SUPPLY
304
336
CONTROLLER
306
308
314
CONDUCTIVE LAYER ETCH GAS
302
312
310
330
301
316
DIELECTRIC LAYER ETCH GAS
328
318
PRESSURE CONTROL VALVE
Match Network
332
SILICON SUBSTRATE ETCH GAS
320
PUMP
BIAS VOLTAGE POWER SUPPLY
334
326

FIG. 3

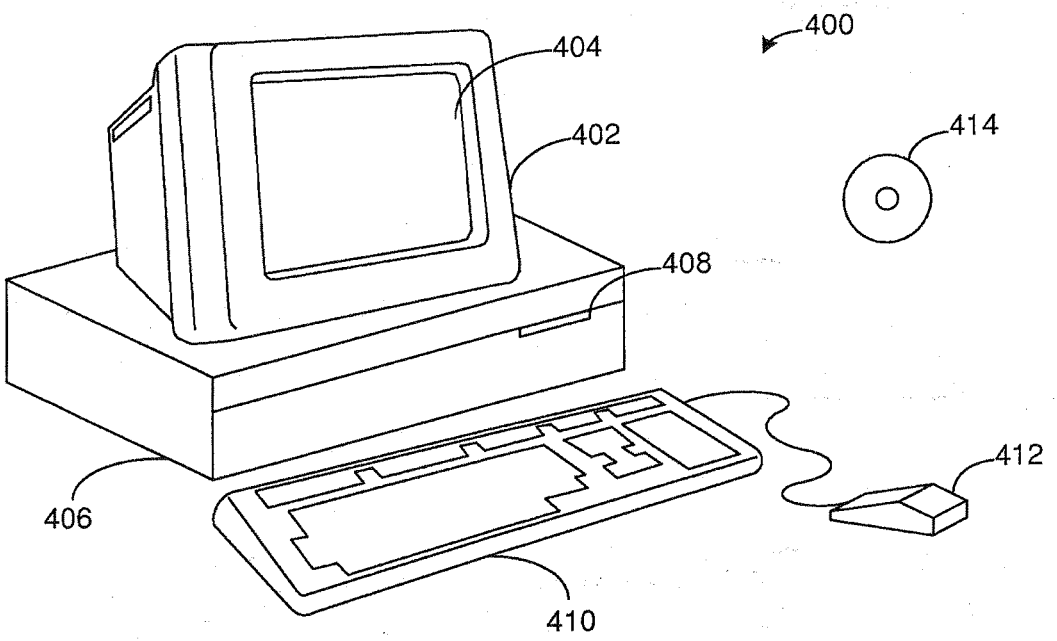

400
404
402
414
408
412
406
410

FIG. 4A

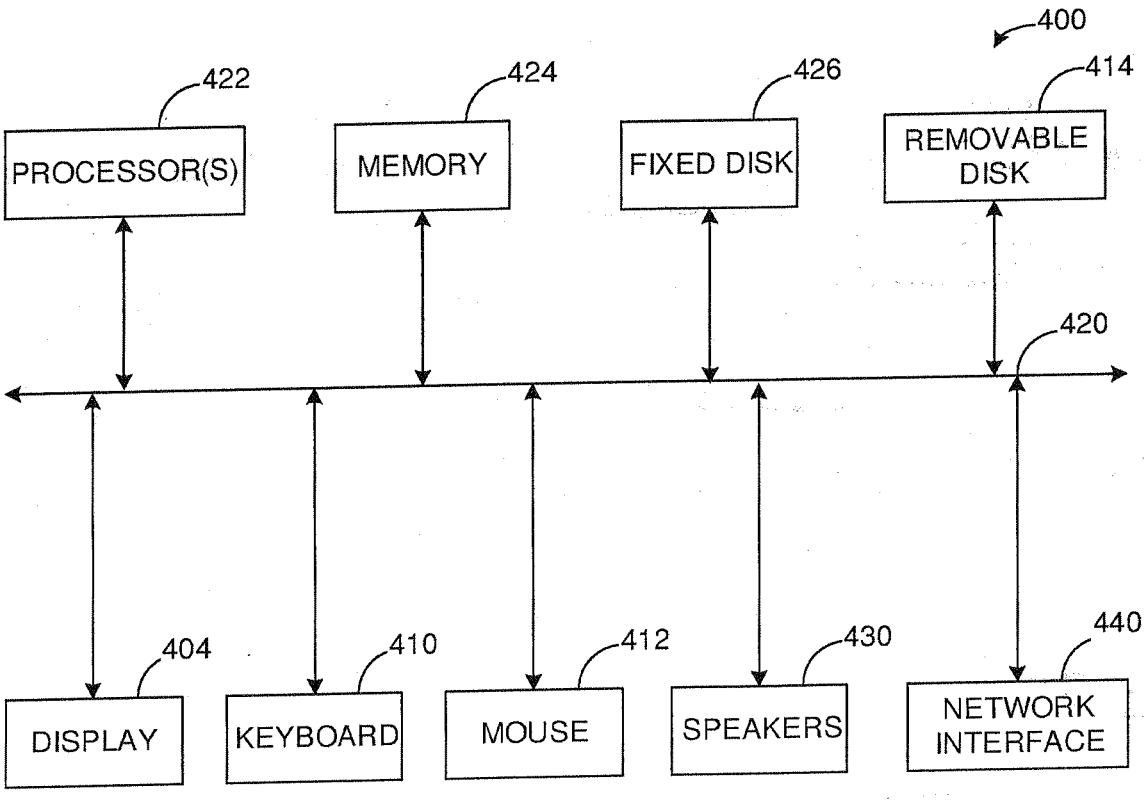

400
422
424
426
414
PROCESSOR(S)
MEMORY
FIXED DISK
REMOVABLE DISK
420
404
410
412
430
440
DISPLAY
KEYBOARD
MOUSE
SPEAKERS
NETWORK INTERFACE

FIG. 4B

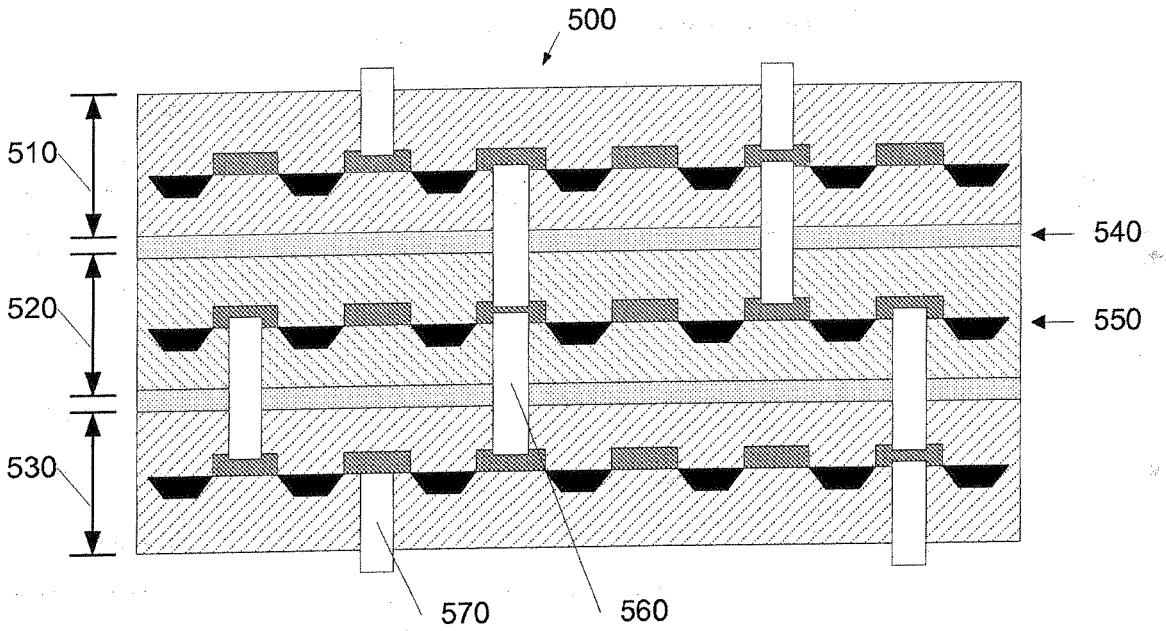


FIG. 5

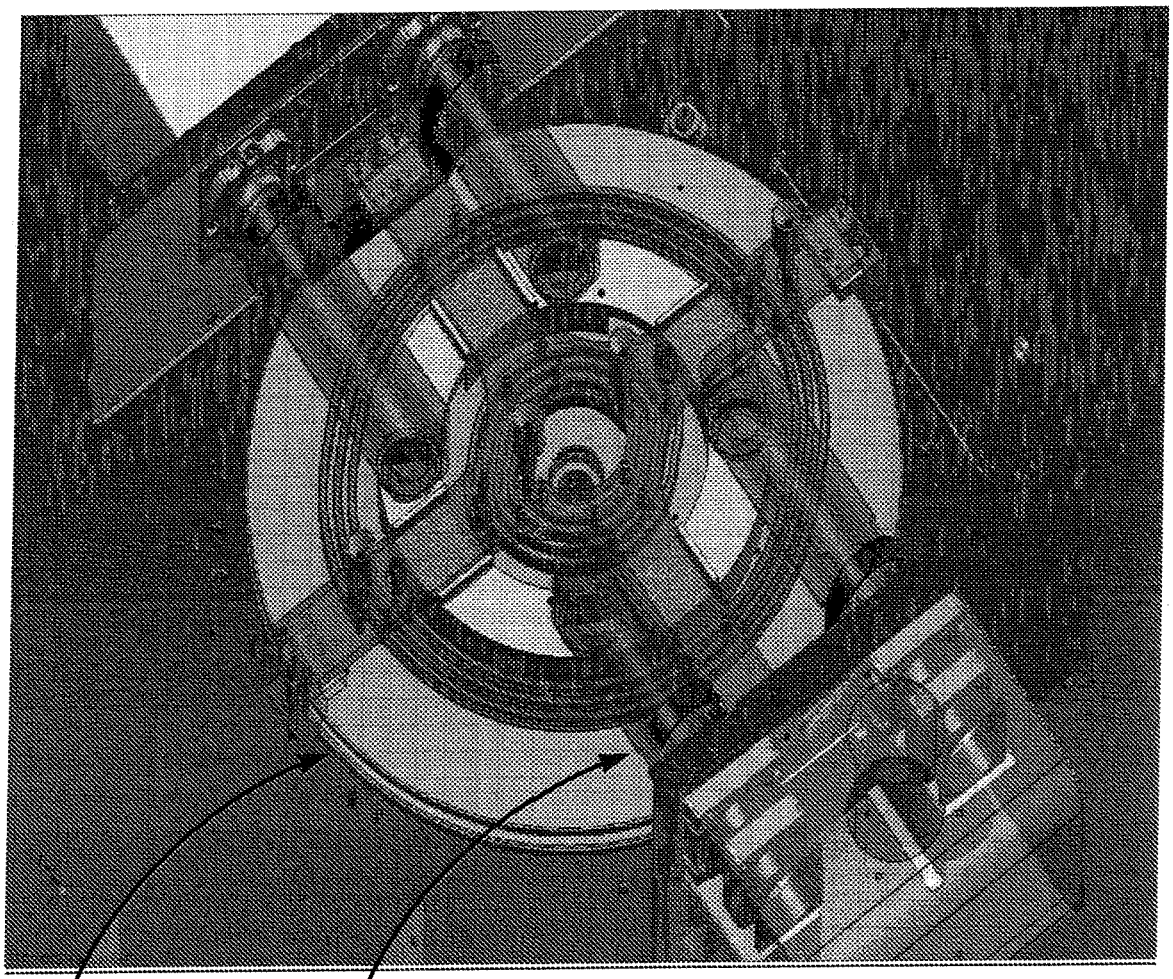


FIG. 6

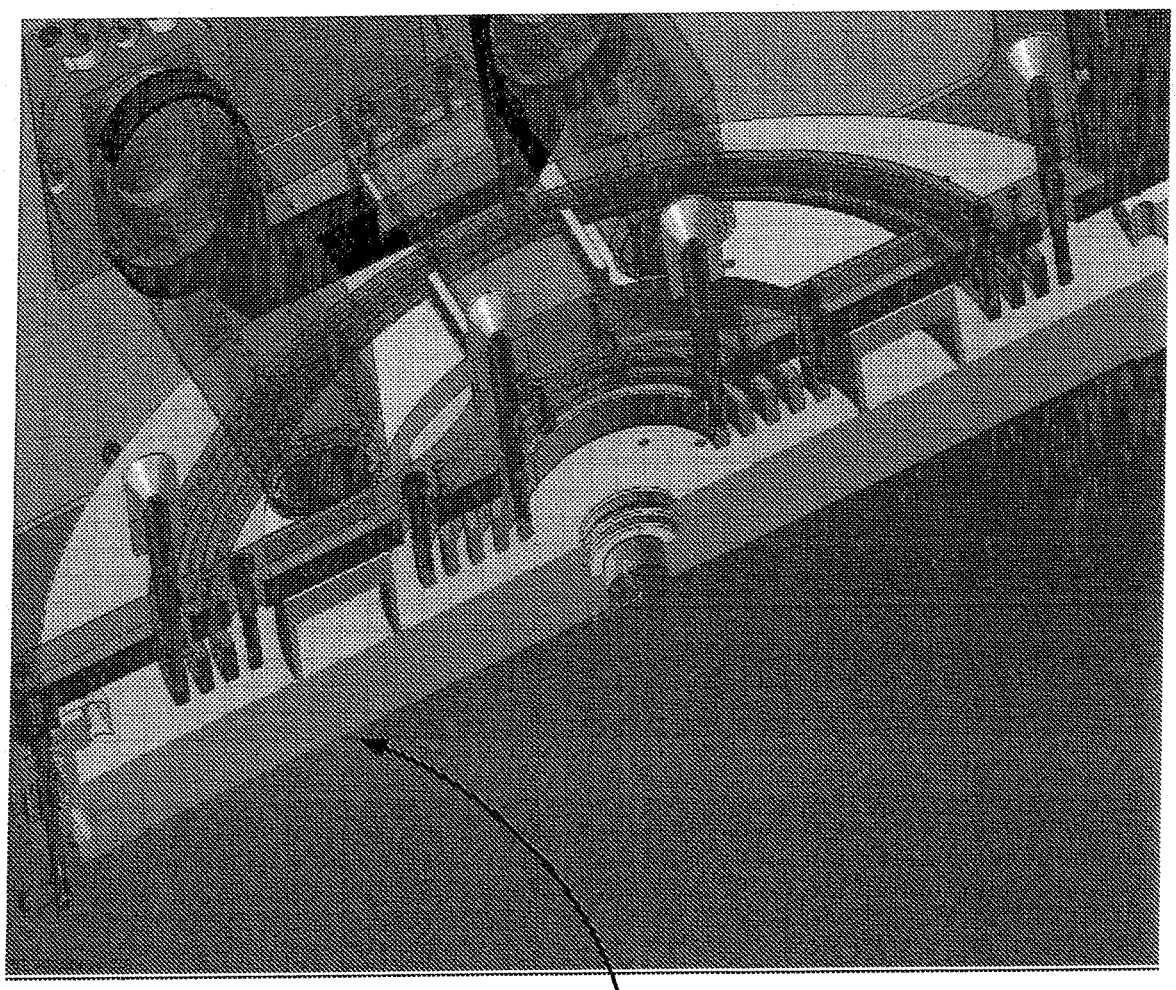


FIG. 7

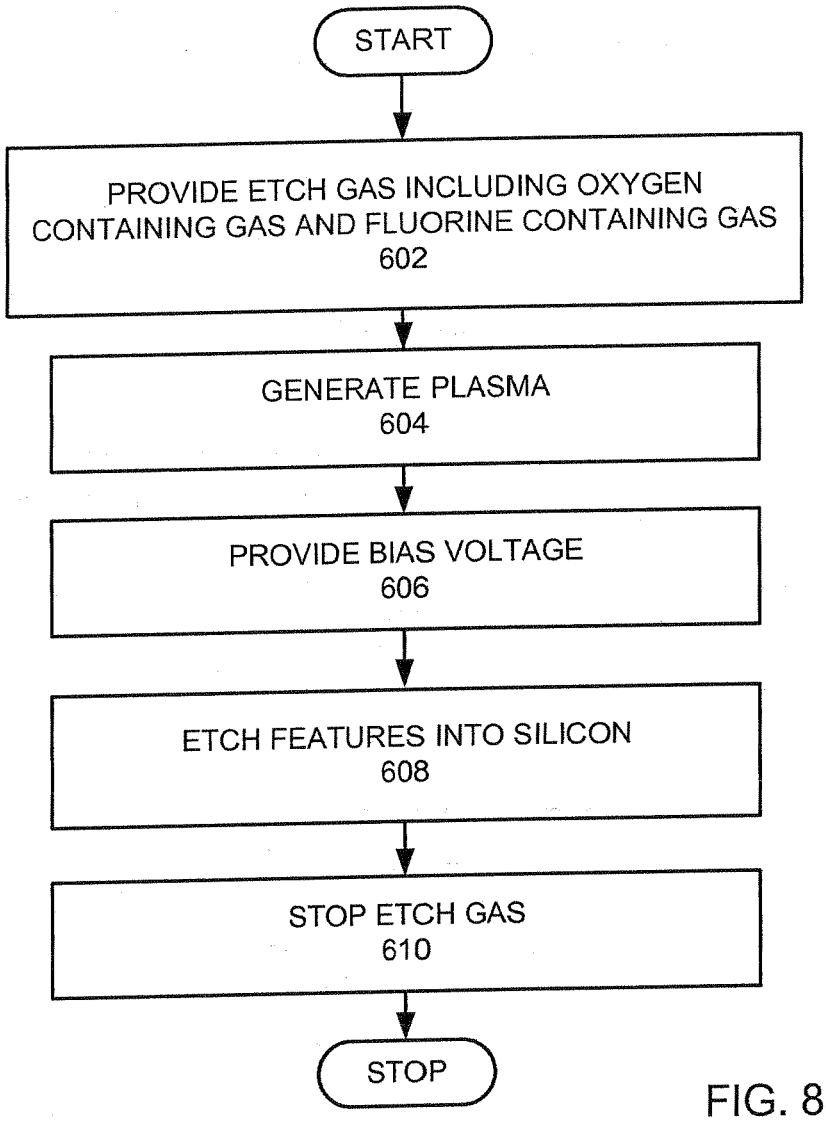

START
PROVIDE ETCH GAS INCLUDING OXYGEN CONTAINING GAS AND FLUORINE CONTAINING GAS
602
GENERATE PLASMA
604
PROVIDE BIAS VOLTAGE
606
ETCH FEATURES INTO SILICON
608
STOP ETCH GAS
610
STOP

FIG. 8

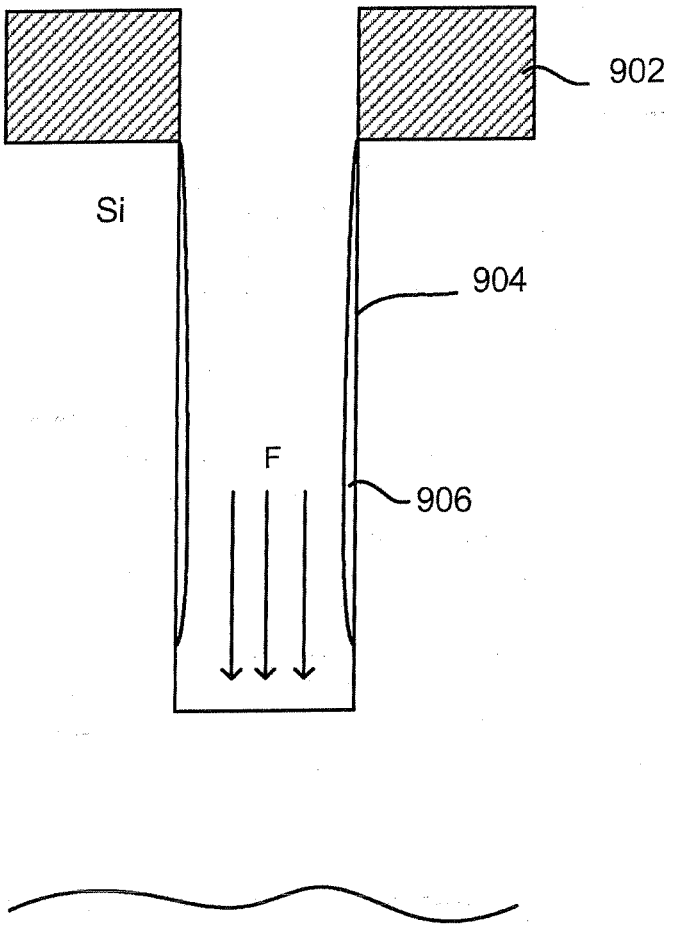


FIG. 9

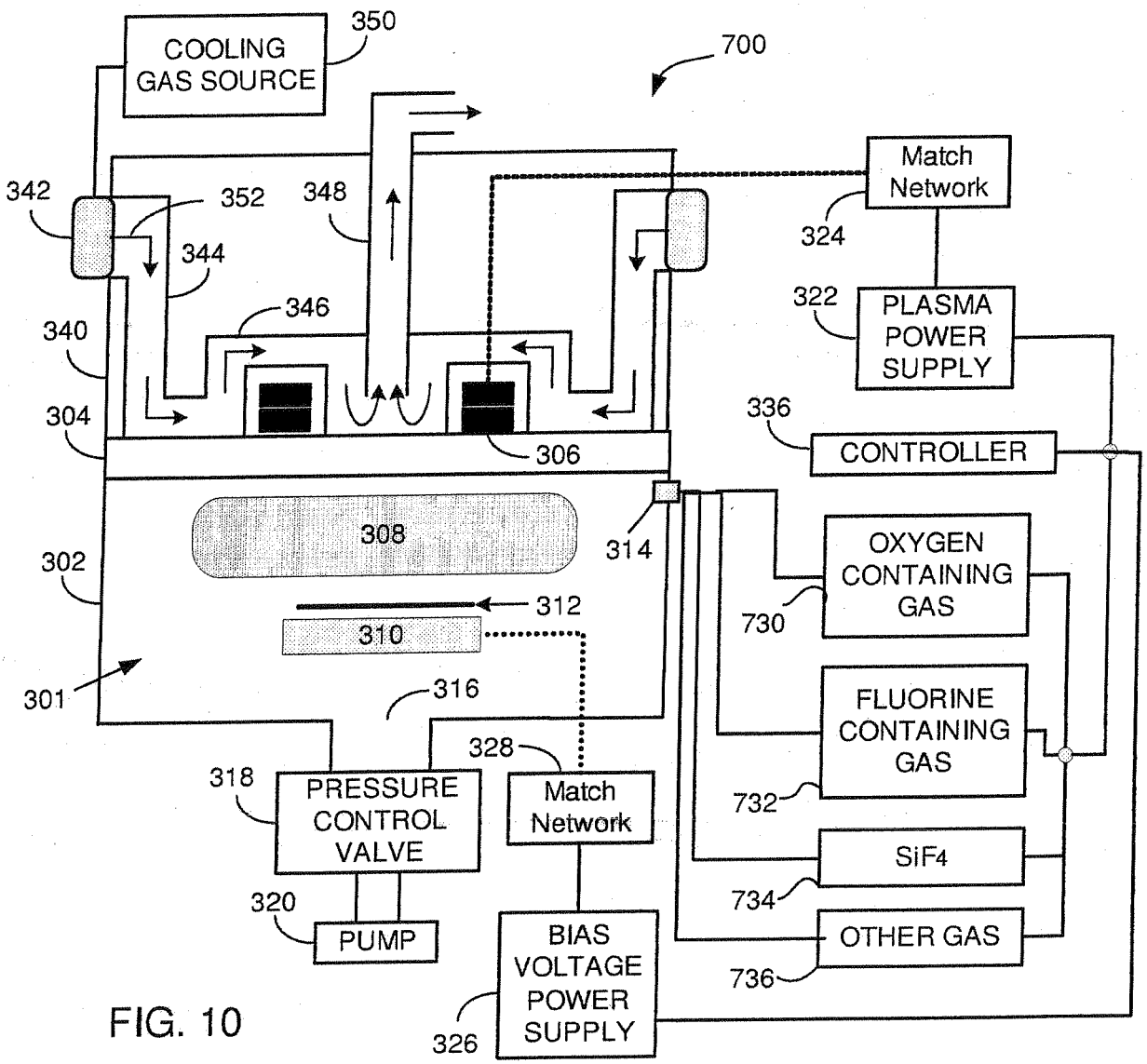

COOLING GAS SOURCE
350
700
Match Network
324
342
352
348
344
346
322
PLASMA POWER SUPPLY
340
304
306
336
CONTROLLER
308
314
OXYGEN CONTAINING GAS
730
302
312
310
301
316
FLUORINE CONTAINING GAS
328
318
PRESSURE CONTROL VALVE
Match Network
732
SiF4
734
320
PUMP
BIAS VOLTAGE POWER SUPPLY
OTHER GAS
736
326

FIG. 10